

XX. *On Jansonia, a new Genus of Leguminosæ, from Western Australia.*
By Mr. RICHARD KIPPIST, Libr. L.S. &c. &c.

Read May 4th, 1847.

HAVING recently been engaged in the examination of an interesting collection of plants formed by the late Mr. Gilbert in Western Australia, and kindly forwarded to me by Mr. Saunders for determination, and the selection of a set for the Society's herbarium, I have had the satisfaction of finding among them one which, as it appears to me, cannot with propriety be referred to any existing genus; and I venture to hope that a short account of it may not be thought wholly unworthy the attention of the Linnean Society, whose Transactions have so greatly contributed towards elucidating the Australian Flora, of all others perhaps the most interesting from the number of singular and anomalous forms which it includes.

The plant which I now propose to describe belongs to the Papilionaceous subdivision of *Leguminosæ*, and is remarkable for its deviation from the prevailing structure of the floral envelopes in that order, more especially of the petals, the proportions which these commonly bear to each other being here exactly reversed; the vexillum, for example, which in a Papilionaceous flower of the more usual type exceeds both keel and wings in size, is here so exceedingly minute, as, in a cursory glance, almost to escape observation; while the keel, usually shorter than the wings, here far exceeds them in length. The ordinary proportions of the calyx are in like manner reversed; the upper lip, generally the largest where any difference of size exists, being scarcely one-fourth as long as the lower, whose intermediate segment extends beyond the lateral ones, while the upper lip is cleft nearly to the base, still further increasing the apparent obliquity. The stamens likewise participate in this irregularity, the anterior filaments being considerably longer than the poste-

rior, and adhering slightly to each other and to the tube of the calyx, while the remaining ones are perfectly free.

I shall now proceed to give the essential characters of the genus, which I propose to dedicate to the memory of my lamented friend Joseph Janson, Esq., F.L.S., whose ardent attachment to the study of natural history (which formed a principal relaxation of his leisure hours), and whose constant exertions to infuse a taste for it in others, eminently entitle him to such a distinction; while his entire devotion to the interests of the Linnean Society, and the zeal and liberality which he ever evinced in promoting its objects, give him an especial claim to be commemorated in its publications.

JANSONIA.

CHAR. GEN. *Calyx* ebracteatus, bilabiatus; labio superiore ferè ad basin bifido; inferiore 4-plò longiore, tripartito; segmentis omnibus acutis. *Corollæ Papilionaceæ petala* longè stipitata: *vexillum* ovato-lanceolatum, reflexum, *alis* oblongo-ellipticis multò brevius: *carinæ* compressæ (alis $\frac{1}{3}$ longioris) petala oblonga, basi auriculata, dorso connata. *Stamina* 10, libera vel imâ basi cohærentia, inæquilonga, persistentia. *Ovarium* villosissimum substipitatum, *stipitulo* basi vaginulâ cincto, pauci- (4-6-) ovulatum, *suturis* non inflexis. *Stylus* filiformis, elongatus, apice incurvus, glaber. *Stigma* parvum. *Legumen* ignotum.

Suffrutex Novæ-Hollandiæ Austro-occidentalis, Brachysemati *proximus*; ramis *erectis vel adscendentibus*; foliis *oppositis oblongo-ovatis, emarginatis, mucronatis, utrinque reticulatis, margine revolutis, subundulatis, minutè denticulatis*; stipulis *lanceolato-subulatis, demùm deciduis*; floribus *sessilibus, in capitula cernua, 4-flora, bracteis 4 ovatis, decussatis, coriaceis, fuscis, extùs sericeis suffulta, ramos breves axillares terminantia, congestis*.

J. FORMOSA.

DESCR. Suffrutex? Rami suberecti vel adscendentes, teretes; juniores subcompressi, longitudinaliter striati, pilis laxis cinereis obsiti; adulti glabri. Folia opposita, brevè petiolata, 2-3-pollicaria, internodiis multò breviora, ovato-oblonga vel elliptica, emarginata, subcoriacea, margine undulata, recurva, minutè repando-denticulata, utrinque reticulato-venosa, subtèr pallidiora, glabra, vel pilis appressis inconspicuis tecta; nervo medio, subtùs valdè prominente, in mucronem brevem recurvum desinente. Petioli breves, 1-3 lineas longi, laxè pilosi. Stipulæ lanceolatæ, subulato-acuminatæ, petiolo multò longiores, coriaceæ, fusæ, extùs pilosæ, recurvæ, tardè deciduæ. Flores sessiles,

in capitula 4-flora, cernua, brevissimè pedunculata, ad extremitates ramorum brevium axillarium sita, bracteis 4 ovatis, coriaceis, extùs velutinis inclusa, parùm infra ramuli apicem in mucronem brevem sericeum productum verticillatim dispositi. Calyx extùs longè sericeus, ebracteatus, bilabiatus; labiis valdè inæqualibus, superiore minore, ferè ad basin fisso, inferiore 4-plò longiore, profundè tripartito. Corolla papilionacea. Petala omnia longè stipitata, atro-rubra. Vexillum minimum, laminâ lanceolato-ovatâ, stipite paullò breviorè, reflexâ. Alæ segmenta lateralia labii inferioris calycis æquantes; carinâ $\frac{1}{4}$ breviores, laminâ ellipticâ, basi cucullatâ, stipitem subæquante. Carinæ elliptico-oblongæ, calycem parùm excedentis, petala basi suprâ auriculata, dorso cohærentia. Stamina 10, persistentia, inæqualia, anteriora longiora, parùm exserta. Filamenta glabra, basi dilatata, obliquè calycis tubo (et 3 inferiora inter se) brevissimè connexa. Antheræ oblongæ uniformes. Germen subsessile, ovatum, ventricosum, pilis longis sericeis vestitum, 4-6-ovulatum, suturis non introflexis, stipitulo basi vaginulâ carnosâ cincto. Stylus filiformis, glaber, staminibus paullò longior, apice incurvus. Stigma minutum, subcapitatum. Legumen haud visum.

Habitat in Novæ-Hollandiæ orâ Austro-occidentali, ad "Scott's River," ubi (anno 1842?) legit beat. *Gilbert* (v. s.). Vidi etiam specimen, habitu debiliore, et foliis ramulisque pubescentioribus, paullò diversum, a *Dom. Jac. Drummond* in vicinitate Coloniae "Swan River" lectum, et a *Dom. C. M. Lemann, M.D.* mihi benignè communicatum.

The nearest affinity of *Jansonia* unquestionably is with *Brachysema*, with which genus it agrees in its unguiculate petals, in the form and unusual length of the keel, in the extreme shortness of the standard, in its elongated filiform style, and in its shortly-stalked villous germen, surrounded at the base by a minute fleshy ring. It is however abundantly distinguished by its capitate inflorescence, by the remarkable inequality of its calycine segments, by the much greater length of the claws of its petals, and by the paucity of its ovules, which in *Jansonia* do not appear to exceed six in number, while in three species of *Brachysema* which I have examined, I have never found fewer than twelve.

From its possessing many of the characters ascribed to *Leptosema*, I was at one time disposed to regard my plant as a second species of that genus, although evidently very different in habit from the one described by Mr. Bentham in the 'Annalen des Wiener Museums,' from a specimen gathered by the late Mr. A. Cunningham at Sius Island, on the north coast of New Holland: but Mr. Heward having kindly permitted me to examine an authentic speci-

men in his possession, I found no difficulty in satisfying myself that the two plants were generically distinct; the calyx in *Leptosema* being bibracteate, and composed of two *nearly equal* lips, the upper *very slightly* bifid, the vexillum scarcely unguiculate, the wings* about equal in length to the keel, and *the carinal suture of the legume distinctly inflexed*. The inflorescence is likewise very different in the two plants: in *Leptosema* the flowers are distinctly pedicellate, alternate, and disposed in a densely-crowded raceme, rather than a capitulum; whereas in *Jansonia* they are perfectly sessile, arranged in a verticillate manner round a common axis, which is slightly prolonged beyond the point whence the flowers spring in the form of a short mucro.

EXPLANATION OF PLATE XVI.

- Fig. *a*. Capitulum, with its bracts expanded, and three of the flowers removed.
b. Calyx, with the stamens adhering to its base.
c. Standard.
d. One of the wings.
e. Keel.
f. Germen.
g. Germen, laid open.
h. Germen, magnified.

* The wings, which (apparently from their contracted upper portions having been broken off in the flowers examined by him) are described by Mr. Bentham as "vexillo subæquilongæ," are in reality distinctly longer than the vexillum, and fully equal in length to the keel, described as "alis longior et latior."

P.S.—Since this paper has been in print I have received the final part of Dr. Lehmann's *Plantæ Preissianæ*, in which (vol. ii. p. 206) Dr. Meisner has described, apparently for the first time, under the name of *Cryptosema*, a plant which I have no doubt will prove identical with my genus *Jansonia*.

Although the title-page to the second volume of '*Plantæ Preissianæ*' bears date '1846-7,' and the preface 'Nov. 1847,' it is evident, from an advertisement on the cover of that part of the work in which *Cryptosema* is described, that it was not published before *May* 1848. A brief report of my paper, however, had appeared in the *Gardener's Chronicle* of *May* 8th, 1847, and a somewhat fuller notice, indicating the principal characteristics of the genus, and its nearest affinities, in the *Athenæum* of *May* 15th. The essential character in Latin was given in the *Proc. Linn. Soc.*, No. 33, issued *Sept.* 11, 1847, and reprinted in the *Ann. Nat. Hist.* for *March* following. There can therefore, I apprehend, be no question that the name *Cryptosema* must be suppressed in favour of that of *Jansonia*.—R.K.